PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Title:	"System and Method for Integrating Off-Line User Ratings of Businesses with Search Engines"	**RECEIVED**

Applicant(s): SUNDARESAN, Neelakantan

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Board of Patent Appeals and Interferences
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450.

APPEAL BRIEF

Dear Sir:

This appeal brief is submitted under 35 U.S.C. §134. This appeal is further to Appellants' Notice of Appeal that was filed on **June 9, 2004**:

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(1)   Real Party in Interest

The real party in interest is International Business Machines Corporation.

(2)   Related Appeals / Interferences

No other appeals or interferences exist that relate to the present application or appeal.

(3)   Status of the Claims

The Final Office Action of March 9, 2004 rejects claims 1-32. Claims 1 - 32 are pending and are being appealed.

(4)   Status of the Amendments

No amendments are outstanding.

(5)   Summary of the Invention

<u>Independent Claim 1</u>

As recurrently indicated by the title and throughout the patent application, **the present invention relates to a system and method ("the present system") for integrating off-line user ratings of businesses with search engines** and addresses the problem facing current search engines. Page 1, lines 9-11. The present system re-orders matches to the user query and to rank the search results with higher quality search matches to **higher business satisfaction ratings**. Page 4, lines 20-21.

It is important to clarify and to reemphasize that the present invention is addressed to "businesses", and makes a distinction between the customer

or user on one hand, and businesses on the other hand. As is well known, a business is defined as a company or other organization that buys and sells goods, makes products, or provides services. A business must not be confused with, or used interchangeably with, the customer or user of the system.

Assessing quality involves both accurately matching the user query and identifying a useful, current web page. For instance, search engines may order the matches based on what is referred to herein as "static criteria". Exemplary static criteria are the highest popularity, most recently updated, most visited, most queried, or most interconnected. It is common for users to limit the review of their search to only the first few matches of the search list." Reference is made to page 2, line 18 through page 3, line 4 of the specification.

The present invention also aims at providing an "adequate mechanism by which searches of business sites can be ordered based upon interactive criteria about the businesses themselves, correlating higher quality search matches to higher business satisfaction ratings. For example, popularity, is a commonly used static criterion which is determined by the number of visits or queries of business sites, and which may depend on advertising, strategic business alliances, or creative naming of a site, and is therefore independent of customers' satisfaction with the ranked businesses. Therefore, there is still an unsatisfied need for a system and method that integrate user provided interactive criteria, such as customers and on-line users' satisfaction, with search engine results." Reference is made to page 3, lines 12-20 of the specification.

"Methods for collecting these ratings include, but are not limited to offline surveys such as consumers' reports and surveys that are obtained through web or non-web based rating services that assess, for example, customer satisfaction. In another embodiment, rankings are provided by an independent ranking system through either offline or on-line surveys and the **rankings are established independent of the search engine or the user of the search engine**. Optionally, on-line questionnaires can be attached to the search engine, and the ratings provided by such on-line questionnaires and offline ratings can be weighted and combined to form a composite rating system.

The business rating system integrates the off-line ratings (and optionally the on-line ratings) with the search results, and ranks and presents the integrated search results to the user based on such ratings. In this manner, the user of a search engine receives feedback from other off-line and possibly on-line users and/or customers about businesses of interest. Those businesses with higher ratings are ranked at the top of the search list.

In operation, the user enters a query in the user interface of the search engine. The search engine searches the metadata repository for sites that match the user query, and also searches the business ratings repository. One or more sites in the metadata search results may correspond to matches in the business ratings search. The search engine determines the rank of each corresponding site in the ranking database and ranks the search results based on interactive criteria about the businesses. The ranked results are then presented to the on-line user." Reference is made to page 4, line 4 through page 5, line 15 of the specification, with emphasis added.

In addition, **the business rating system is a self correcting system** in that after a certain period of use, the users' interactive ratings could significantly affect the ranking of the businesses, and ultimately, lower ranked businesses stand lower chances of being browsed and thus selected. For example, if a user selects a site that had an initially high ranking and was not satisfied with the business, that user gives a poor rating to the business. If a reasonable number of users give a similarly poor rating to the same business, the business site will automatically ranked lower.

The business rating system 10 will now be described with further reference to FIG. 2. The business rating system 10 includes a computer program product such as a software package, which is generally comprised of an on-line indexing engine 100, a query transformer 110, a search results transformer 130, a ranking based result sorter 140, an on-line ranking system 150, a metadata repository 160, and an on-line ranking repository 170.

In use, the crawler visits and downloads web documents to the metadata repository 160 where they are stored and updated systematically. The web documents are then indexed by the indexing engine 100 to generate indexed data 175. The on-line ranking system 150 receives users' on-line surveys or feedbacks, and generates ranking data for storage in the on-line ranking repository 170. While the business rating system 10 is described as including two repositories 160, 170, it should be clear these two repositories 160, 170 can be functionally combined in a single database." Reference is made to page 10, line 18 through page 11 line 7.

In addition, the business rating system is a self correcting system in that after a certain period of use, the users' interactive ratings could significantly affect the ranking of the businesses, and ultimately, lower ranked businesses stand lower chances of being browsed and thus selected. For example, if a user selects a site that had an initially high ranking and was not satisfied with the business, that user gives a poor rating to the business. If a reasonable number of users give a similarly poor rating to the same business, the business site will automatically ranked lower.

Independent Claim 9

Claim 9 recites a self-correcting computer program product compared to a self-correcting system. Otherwise, both claims 1 and 9 recite generally similar elements and limitations.

Independent Claim 17

Claim 17 recites a method for use with a search engine to self-correctively rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants compared to a self-correcting system. Otherwise, both claims 1 and 17 recite generally similar elements and limitations. Reference is also made to method 300 illustrated in FIGS. 3A and 3B.

Independent Claim 25

Claim 25 recites a search result service for use with a search engine to self-correctively rank search results based upon a ranking of businesses that

are selected from an unrestricted pool of merchants. Otherwise, both claims 1 and 25 recite generally similar elements and limitations.

(6)   Rejection Grounds

First Rejection Ground:

Claims 1, 9, 17, and 25 stand rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement.

Second Rejection Ground:

Claims 1-2, 6-10, 14-18, 22-26, and 30-32 stand rejected under 35 U.S.C. 103(a) as being unpatentable over BizRate.com (http://web.archive.org/web/19981205082910/http://Www.bizrate.com/) in view of Peters et al. (USP 5,893,098).

Third Rejection Ground:

Claims 3-5, 11-13, 19-21, and 27-29 stand rejected under 35 U.S.C. 103(a) as being unpatentable over BizRate.com (http://web.archive.org/web/19981205082910/http://www.bizrate.com/) in view of Peters et al. (USP 5,893,098) and Applicant Admitted Prior Art (Background of the Invention, pages 1-3).

Fourth Rejection Ground:

Claims 1, 9, 17, and 25 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and

distinctly claim the subject matter which applicant regards as the invention.

(7) Grouping of Claims

Claims 1-8 are grouped together.
Claims 9-16 are grouped together.
Claims 17-24 are grouped together.
Claims 25-32 are grouped together.

(8) Arguments

8.1 - First Rejection Ground:

Claims 1, 9, 17, and 25 were rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement, reasoning that: "The claim(s) contains subject matter, which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention. As in claims 1, 9, 17 and 25, the features: businesses that are selected from an unrestricted pool of merchants, and updated cumulative business satisfaction ratings from the users' on-line surveys or feedback automatically cause the on-line ranking system to re-index the rating data were not described in the specification."

Applicant respectfully traverses this rejection ground, and present herein arguments in support of this position.

<u>8.1.A – The feature "businesses that are selected from an unrestricted pool of merchants" is disclosed in the present application.</u>

Applicant submits that the following feature "businesses that are selected from an unrestricted pool of merchants" is disclosed in the present application. Reference is made to FIG. 1 of the application that is described as follows: "FIG. 1 is a schematic illustration of an exemplary operating environment in which a business rating system of the present invention may be used" (Page 6, lines 7-8).

In addition, the application clearly states that "the business rating system 10 will be described in connection with the WWW" (page 9, lines 16-17). In other terms, the merchants are located on the Internet, and absent a clear indication to the contrary, it should be quite clear to person of ordinary skills in the art that the businesses on the Internet are part of an unrestricted pool of merchants.

<u>8.1.B – The feature "updated cumulative business satisfaction ratings from the users' off-line surveys or feedback automatically cause the off-line ranking system to re-index the rating data." is disclosed in the present application.</u>

Applicant submits that the following feature "businesses that are selected from an unrestricted pool of merchants" is disclosed in the present application.

The above feature is inherent in the present system in that as new satisfaction ratings are collected by the users, these new satisfaction ratings formed the updated cumulative business satisfaction ratings, which, upon

query by another user, the rating data are index again, that is re-indexed. It should be understood that the indexing process of the rating data is a continuous, automatic process and the rating data are **not** indexed once and the process stops (which defeats the intent of the present invention).

To conclude, Claims 1, 9, 17, and 25 satisfy 35 U.S.C. 112, first paragraph.

8.2 - Second Rejection Ground:

Claims 1-2, 6-10, 14-18, 22-26, and 30-32 were rejected under 35 U.S.C. 103(a) as being unpatentable over BizRate.com (http://web.archive.org/web/19981205082910/http://Www.bizrate.com/) in view of Peters et al. (USP 5,893,098), based on the following ground:

"Claims 1-2, 6-10, 14-18, 22-26 and 30-32 are rejected under 35 U.S.C. 103(a) as being unpatentable over BizRate.com (http://web.archive.org/web/19981205082910/http://www.bizrate.com/) in view of Peters et al. (USP 5,893,098).
Regarding to claims 1, 9, 17 and 25, BizRate.com is an online service website that provides consumers with information of a product based on ranking data from customers. A merchant is evaluated by a remote user either at the time of sale via a Web interface, or after product delivery via email (BizRate, page 19). As shown in pages 17-18 is a summary of feedback from actual customers. Thus, the BizRate system conducts two kinds of survey, one via a Web interface as on-line, and one via email as off-line. If the survey received by email, BizRate is an off-line ranking system for receiving any of users' online surveys or feedback about businesses. Every merchant listed in BizRate has been rated based on 10 dimensions of service, which includes, Price, Product Selection, Product Information... (BizRate, pages 8 and 13-14) as the step of generating rating data from the any of the users' off-line surveys or feedback. As shown in page 1 is an interface of BizRate for receiving a query, either by entering search criteria into the search box or browsing the Product Category, from consumers who are located at remote locations. Pages 3-5 is a result of the merchants under category Apparel > Accessories. By using Shopping Filters feature, a user could filter the list

of merchants to only those that have the features and capabilities of the user. If only one aspect of shopping is particularly important to a user, a pull down menu could be used to have the merchants ranked according to the rating data on that dimension (BizRate, page 11). As seen in pages 3-5, by entering keywords into the search box, a remote user receives a result list of merchant as in pages 3-5. If the filter is disable, the rating data correlates SunglassSite.com as higher quality search match to an overall rating of 8.47 based on 0-10 numerical rating scale as higher business satisfaction rating. Pages 3-5 also indicate a result sorter for sorting query results generated by the search engine, based on the rating data and for generating ranked matches. As shown in pages 22-26 is the survey for B2C Online Merchant based on a user profile with the user's email address for communication as creating a user profile history from a user's address. B2C could be re-rated by the user if he/she makes another purchase with B2C as disclosed in page 19, and obviously, the rating will be updated based on the last evaluation as enabling the user to update rating that was previously provided by the user, and by using the email address, no one can revise rating provided by others as disabling the user from revising rating provided by other users. BizRate fails to teach the step of indexing the rating data, storing the rating data indexed by the off-line ranking system, and updated cumulative business satisfaction rating from the users' on-line ranking system or feedback automatically cause the on-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data. Peters teaches a system for obtaining surveys from a plurality of users (Peters, Col. 2, Line 45-Col. 3, Line 16). The survey answers with rating data are indexed and stored in a database by name and email address as indexing the rating data and storing the rating data (Peters, Col. 4, Lines 28-30; Col. 19, Lines 46-57; Col. 21, Line 65-Col. 22, Line 13; Col. 30, Lines 12-19). Peters further discloses the database is updated with respondents answer, or added by new survey (Peters, Col. 26, Lines 43-50). As seen, the feedback causes the system to re-index the database with update or new respondents answer by using email address, and obviously on BizRate, based on the new rating after re-indexing rating data, when a new search occurs, a new rank match is similar to BizRate pages 3-5 will be returned to the user as feedback automatically cause the on-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data. It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the BizRate system by indexing the rating data and storing the rating data that were index in a

data repository as taught by Peters in order to update, retrieve the rating data of a business survey."

Applicant respectfully traverses this rejection and submits that the claims on file are not obvious in view of the cited references and are patentable thereover. In support of this position, Applicant submits the following arguments:

8.2.A. Legal Standards for Obviousness

The following legal authorities set the general legal standards in support of Applicant's position of non obviousness, with emphasis added for added clarity:

- MPEP §2143.03, "All Claim Limitations Must Be Taught or Suggested: To establish prima facie obviousness of a claimed invention, **all the claim limitations must be taught or suggested by the prior art**. In re Royka, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "**All words in a claim must be considered** in judging the patentability of that claim against the prior art." In re Wilson, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970). If an independent claim is nonobvious under 35 U.S.C. 103, then any claim depending therefrom is nonobvious. In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)."

- MPEP §2143.01, "The Prior Art Must Suggest The Desirability Of The Claimed Invention: There are three possible sources for a motivation to combine references: the nature of the problem to be solved, the teachings of the prior art, and the knowledge of persons of ordinary skill in the art." In re Rouffet, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998) (**The combination of the references taught every element of the claimed invention, however without a motivation to combine, a rejection based on a prima facie case of obvious was held improper.**). The level of skill in the art cannot be relied upon to provide the suggestion to combine references. Al-Site Corp. v. VSI Int'l Inc., 174 F.3d 1308, 50 USPQ2d 1161 (Fed. Cir. 1999).

- "**Obviousness cannot be established** by combining the teachings of the prior art to produce the claimed invention, **absent some teaching or suggestion** supporting the combination." *In re Fine, 837 F.2d at 1075, 5 USPQ2d at 1598* (citing *ACS Hosp. Sys. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984)*). **What a reference teaches** and whether it teaches toward or **away from the claimed invention** are questions of fact. See *Raytheon Co. v. Roper Corp., 724 F.2d 951, 960-61, 220 USPQ 592, 599-600 (Fed. Cir. 1983)*, cert. denied, *469 U.S. 835, 83 L. Ed. 2d 69, 105 S. Ct. 127 (1984)*. "

- "When a rejection depends on a combination of prior art references, there must be **some teaching, suggestion, or motivation** to combine the references. See *In re Geiger, 815 F.2d 686, 688, 2 USPQ2d 1276, 1278 (Fed. Cir. 1987)*." Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention **where there is some teaching, suggestion, or motivation** to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See MPEP 2143.01; *In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000)*; *In re Fine, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)*; and *In re Jones, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992)*.

- "With respect to core factual findings in a determination of patentability, however, the **Board cannot simply reach conclusions based on its own understanding or experience** -- or on its assessment of what would be basic knowledge or common sense. **Rather, the Board must point to some concrete evidence in the record** in support of these findings." See *In re Zurko, 258 F.3d 1379 (Fed. Cir. 2001)*.

- "We have noted that **evidence of a suggestion, teaching, or motivation to combine** may flow from the prior art references themselves, the knowledge of one of ordinary skill in the art, or, in some cases, from the nature of the problem to be solved, see *Pro-Mold & Tool Co. v. Great Lakes Plastics, Inc., 75 F.3d 1568, 1573, 37 USPQ2d 1626, 1630 (Fed. Cir. 1996)*, *Para-Ordinance Mfg. v. SGS Imports Intern., Inc., 73 F.3d 1085, 1088, 37 USPQ2d 1237, 1240 (Fed. Cir. 1995)*, although "the suggestion more often comes from the teachings of the pertinent references," *Rouffet, 149 F.3d at 1355, 47 USPQ2d at 1456*. The range of sources available, however, does not diminish the requirement for actual evidence. That is, **the showing must be clear and particular**. See, e.g., *C.R. Bard, 157 F.3d at 1352, 48 USPQ2d at 1232*. **Broad conclusory statements regarding the teaching of multiple references, standing**

<u>alone, are not "evidence."</u> E.g., McElmurry v. Arkansas Power & Light Co., 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993) ("Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact."); In re Sichert, 566 F.2d 1154, 1164, 196 USPQ 209, 217 (CCPA 1977)." See In re Dembiczak, 175 F. 3d 994 (Fed. Cir. 1999).

- "To prevent the use of hindsight based on the invention to defeat patentability of the invention, **this court requires the examiner to show a motivation to combine the references** that create the case of obviousness. In other words, **the examiner must show reasons** that the skilled artisan, confronted with the same problems as the inventor and with no knowledge of the claimed invention, would select the elements from the cited prior art references **for combination in the manner claimed**." See In re Rouffet, 149, F.3d 1350 (Fed. Cir. 1998).

- The mere fact that references can be combined or modified does not render the resultant combination obvious **unless the prior art also suggests the desirability of the combination**. In re Mills, 916 F.2d 680, 16 USPQ2d 1430 (Fed. Cir. 1990). Although a prior art device "may be capable of being modified to run the way the apparatus is claimed, **there must be a suggestion or motivation in the reference** to do so." 916 F.2d at 682, 16 USPQ2d at 1432.). See also In re Fritch, 972 F.2d 1260, 23 USPQ2d 1780 (Fed. Cir. 1992) (flexible landscape edging device which is conformable to a ground surface of varying slope not suggested by combination of prior art references).

- If the **proposed modification would render the prior art invention being modified unsatisfactory** for its intended purpose, <u>then there is no suggestion or motivation</u> to make the proposed modification. In re Gordon, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984).

8.2.B. Independent Claims 1, 9, 17, and 25 in Light of the Cited References

Applicant will now present arguments in support of the allowance of independent claims 1, 9, 17, and 25, and the claims dependent thereon, over the cited references. Claim 1, as a representative claim, recites the following elements that are not described in the cited references:

1. **A self-correcting system** for use with a search engine to rank search results **based upon a ranking of businesses that are selected from an unrestricted pool of merchants**, comprising:

an off-line ranking system for receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

wherein the off-line ranking system indexes the rating data;

a ranking repository for storing the rating data indexed by the off-line ranking system;

a result sorter for sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

a profile manager for creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' off-line surveys or feedback automatically cause the off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

With reference to the pages from the BizRate web site, **BizRate does not allow ALL the businesses on the WWW to be rated. In fact, page 8 clearly states: "We do not want to list every merchant on the Web, only those that can serve you best. As one or our users puts it: "If it ain't on BizRate, it ain't worth shopping at!"**

As a result, BizRate does not describe a **self-correcting system** for use with a search engine to rank search results **based upon a ranking of businesses that are selected from an unrestricted pool of merchants**. One of the main problems addressed by the present invention is to provide a

better search based on an unrestricted pool of merchants, such as on the merchants on the Internet.

The present system is automatic in that it does not require an intermediary company, such as BizRate, to select the merchants first and then take into account the customers' feedback.

In addition, the present invention, contrary to BizRate, does not require the staff to spend "countless hours compiling detailed information on each merchant's capabilities and site features." Reference is made to page 8 of the BizRate cited reference.

Moreover, contrary to BizRate, the present invention opens up the entire pool of merchants all around the globe to being rated by users, whether these users are customers or not. BizRate's survey of customers' opinions is limited to customers who made purchases. Reference is made to the last paragraph on Page 19 of the BizRate cited reference.

In addition, BizRate does not provide a profile manager for creating a user profile history from a user's address, wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users, and wherein updated cumulative business satisfaction ratings from the users' on-line surveys or feedback automatically cause the on-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

Applicant agrees with the Examiner that fails to teach the step of indexing the rating data, storing the rating data indexed by the off-line

ranking system, and updated cumulative business satisfaction rating from the users' ((on-line)) off-line ranking system or feedback automatically cause the ((on-line)) off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data..

In order to compensate for the absence of these important elements, the Examiner essentially resorts to Peters, as indicated in the excerpt above, reasoning in part, as follows: "It would have been obvious for one of ordinary skill in the art at the time the invention was made to modify the BizRate system by indexing the rating data and storing the rating data that were index in a data repository as taught by Peters in order to update, retrieve the rating data of a business survey."

Applicant submits that BizRate does not disclose "a result sorter for sorting query results generated by the search engine, based on the rating data from the on-line ranking repository, and for generating ranked matches", in that the rating data recited in this element must have been (1) indexed and (2) stored, which steps are admittedly lacking in BizRate.

Though Peters discloses the intake of surveys, it does not output sorted query results based on the "rating data". Applicant submits that "rating data" is clearly defined in the claims as rating data that correlates higher quality matches to higher business satisfaction rating. Thus, Peters does not disclose rating data as claimed herein, and therefore the combination of Peters and BizRate, is not permissible because neither reference provides a suggestion or teaching of the missing features.

If however, such combination were permissible, it would still not yield the system and method as claimed herein, in that the combination would still lack the following element: "wherein updated cumulative business satisfaction ratings from the users' on-line surveys or feedback automatically cause the on-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data."

In addition, Peters does not disclose the remaining elements that are missing from BizRate (as presented earlier).

In addition, the office action states as follows:

"the recitation as argued above has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and Kropa v. Robie, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951)."

Applicant respectfully traverses this rejection ground, and submits that the holding of In re Hirao is not applicable to claim 1 in that:

(1) The invention of claim 1 should be considered as a whole, and the preamble of claim 1 is an important part of the invention in that it sets the general function of the system recited by the claim.

In support of this position, Applicant resorts to the following MPEP section, which is reproduced below in relevant parts:

"2141.02 Differences Between Prior Art and Claimed Invention

See also In re Hirao, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) ... The court held "due to the admitted unobviousness of the first two steps of the claimed combination of steps, the subject matter as a whole would not have been obvious to one of ordinary skill in the art at the time the invention was made." 535 F.2d at 69, 190 USPQ at 17 (emphasis in original). The preamble only recited the purpose of the process and did not limit the body of the claim. Therefore, the claimed process was a three step process, not the product formed by two steps of the process or the third step of using that product.)." Emphasis added.

(2) Applicant submits that the preamble of claim 1 sets forth two important features:

(2.A). The **self-correcting** nature of the system,

(2.B). based upon a ranking of businesses that are selected from **an unrestricted pool of merchants**.

More specifically, the **self-correcting nature** of the claimed system relates to the feature of re-indexing of the rating data that is expressly recited in claim 1. Such re-indexing causes, after a certain period of use, the users' interactive ratings to significantly affect the ranking of the businesses, and ultimately, lower ranked businesses stand lower chances of being browsed and thus selected.

In addition, the background section of the patent application explains that the problem addressed by the present invention relates to the WWW (World Wide Web), which is an example of **an unrestricted pool of merchants**. As an example, the patent application states as follows:

"For consumers searching the WWW for businesses, the search methods employed by current search engines provide incomplete information for the users to assess the quality of the businesses. The information provided by authors about their web sites, and the number of visits or queries received by a business site, typically reflect the quality of the web pages, but do not provide information about the quality of

the business." Page 3, lines 5-10.

Applicant incorporates by reference the presentation made earlier in support of the allowance of claim 1, and submits that the independent claims 9, 17, and 25 are similarly not obvious in view of combination of BizRate and Peters, for containing generally comparable elements and limitations. As a result, the independent claims 1, 9, 17, and 25 are allowable, and thus the claims dependent thereon are also allowable, and such allowance is respectfully requested.

8.3. Third Rejection Ground:

Claims 3-5, 11-13, 19-21, and 27-29 were rejected under 35 U.S.C. 103(a) as being unpatentable over BizRate.com (http://web.archive.org/web/19981205082910/http://www.bizrate.com/) in view of Peters et al. (USP 5,893,098) and Applicant Admitted Prior Art (Background of the Invention, pages 1-3).

Claims 3-5, 11-13, 19-21, and 27-29 are allowable for depending on the allowable independent claims 1, 9, 17, and 25, respectively.

8.4. Fourth Rejection Ground:

Claims 1, 9, 17, and 25 stand rejected under 35 U.S.C. 112, second paragraph as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Applicant Agrees with the examiner, and respectfully submits that the informalities consist of typo-graphical errors and that the content

of the claims was clearly understood. To this end, Applicants amend claims 1, 9, 17, and 25, as follows, in satisfaction of 35 U.S.C. 112:

1. (Currently amended) A self-correcting system for use with a search engine to rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

an off-line ranking system for receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

wherein the off-line ranking system indexes the rating data;

a ranking repository for storing the rating data indexed by the off-line ranking system;

a result sorter for sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

a profile manager for creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' ((on-line)) off-line surveys or feedback automatically cause the ((on-line)) off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

9. (Currently amended) A self-correcting computer program product for use with a search engine to rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

an off-line ranking system for receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

wherein the off-line ranking system indexes the rating data;

a ranking repository for storing the rating data indexed by the off-line ranking system;

a result sorter for sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

a profile manager for creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' ((on-line)) off-line surveys or feedback automatically cause the ((on-line)) off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

17. A method for use with a search engine to self-correctively rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

the rating data correlating higher quality search matches to higher business satisfaction ratings;

indexing the rating data by means of an off-line ranking system;

storing the rating data indexed by the off-line ranking system, in a ranking repository;

sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' ((on-line)) off-line surveys or feedback automatically cause the ((on-line)) off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

25. (Currently amended) A search result service for use with a search engine to self-correctively rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

receiving any of users' off-line surveys or feedback about businesses;

generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

indexing the rating data by means of an off-line ranking system;

storing the rating data indexed by the off-line ranking system, in an off-line ranking repository;

sorting query results generated by the search engine, based on the rating data from the off-line ranking repository, and for generating ranked matches;

creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' ((on-line)) off-line surveys or feedback automatically cause the ((on-line)) off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

Respectfully submitted,

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APPENDIX A

CLAIMS ON APPEAL

1. A self-correcting system for use with a search engine to rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

an off-line ranking system for receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

wherein the off-line ranking system indexes the rating data;

a ranking repository for storing the rating data indexed by the off-line ranking system;

a result sorter for sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

a profile manager for creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' off-line surveys or feedback automatically cause the off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

2. The system according to claim 1, further including a search results transformer that converts the ranked matches to a user browsable form.

3. The system according to claim 2, further including an indexing engine that indexes web documents to generate indexed data.

4. The system according to claim 3, further including a metadata repository for storing web documents that have been downloaded off-line.

5. The system according to claim 3, further including a query transformer which, when prompted by a query, applies a query request to the indexed data and generates the query results.

6. The system according to claim 1, further including an on-line ranking system for receiving rating data compiled from an on-line source based on interactive criteria, and for indexing on-line rating data.

7. The system according to claim 1, wherein the off-line source includes any one or more of a questionnaire, a survey, a non-web based rating service, or a web based rating service.

8. The system according to claim 1, wherein the interactive criteria assess the quality of a business in terms of any one or more of: customer satisfaction, professionalism, cost, and ease of use of a product or service.

9. A self-correcting computer program product for use with a search engine to rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

an off-line ranking system for receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

wherein the off-line ranking system indexes the rating data;

a ranking repository for storing the rating data indexed by the off-line ranking system;

a result sorter for sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

a profile manager for creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' off-line surveys or feedback automatically cause the off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

10. The computer program product according to claim 9, further including a search results transformer that converts the ranked matches to a user browsable form.

11. The computer program product according to claim 10, further including an indexing engine that indexes web documents to generate indexed data.

12. The computer program product according to claim 11, further including a metadata repository for storing web documents that have been downloaded off-line.

13. The computer program product according to claim 11, further including a query transformer which, when prompted by a query, applies a query request to the indexed data and generates the query results.

14. The computer program product according to claim 9, further including an on-line ranking system for receiving rating data compiled from an on-line source based on interactive criteria, and for indexing on-line rating data.

15. The computer program product according to claim 9, wherein the off-line source includes any one or more of a questionnaire, a survey, or a web based rating service.

16. The computer program product according to claim 9, wherein the interactive criteria assess the quality of a business in terms of any one or more of: customer satisfaction, professionalism, cost, and ease of use of a product or service.

17. A method for use with a search engine to self-correctively rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

receiving any of users' off-line surveys or feedback about businesses;

the off-line ranking system generating rating data from the any of the users' off-line surveys or feedback;

the rating data correlating higher quality search matches to higher business satisfaction ratings;

indexing the rating data by means of an off-line ranking system;

storing the rating data indexed by the off-line ranking system, in a ranking repository;

sorting query results generated by the search engine, based on the rating data from the ranking repository, and for generating ranked matches;

creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' off-line surveys or feedback automatically cause the off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

18. The method according to claim 17, further including transforming the ranked matches into a user browsable form.

19. The method according to claim 18, further including indexing web documents to generate indexed data.

20. The method according to claim 19, further including storing web documents that have been downloaded off-line.

21. The method according to claim 19, further including applying a query request to the indexed data for generating the query results.

22. The method according to claim 17, wherein receiving rating data includes compiling rating data from an on-line ranking system based on interactive criteria, and indexing the on-line rating data.

23. The method according to claim 17, wherein receiving rating data includes compiling rating data from any one or more of a questionnaire, a survey, or a web based rating service.

24. The method according to claim 17, further including compiling rating data based on interactive criteria that assess the quality of a business in terms of any one or more of: customer satisfaction, professionalism, cost, and ease of use of a product or service.

25. A search result service for use with a search engine to self-correctively rank search results based upon a ranking of businesses that are selected from an unrestricted pool of merchants, comprising:

receiving any of users' off-line surveys or feedback about businesses;

generating rating data from the any of the users' off-line surveys or feedback;

wherein the rating data correlates higher quality search matches to higher business satisfaction ratings;

indexing the rating data by means of an off-line ranking system;

storing the rating data indexed by the off-line ranking system, in an off-line ranking repository;

sorting query results generated by the search engine, based on the rating data from the off-line ranking repository, and for generating ranked matches;

creating a user profile history from a user's address;

wherein the user profile history enables the user to update a rating that was previously provided by the user, and disables the user from revising ratings provided by other users; and

wherein updated cumulative business satisfaction ratings from the users' off-line surveys or feedback automatically cause the off-line ranking system to re-index the rating data, and further cause the result sorter to generate ranked matches based on the re-indexed rating data.

26. The search result service according to claim 25, further comprising transforming the ranked matches into a user browsable form.

27. The search result service according to claim 26, further comprising indexing web documents to generate indexed data.

28. The search result service according to claim 27, further comprising storing web documents that have been downloaded off-line.

29. The search result service according to claim 27, further comprising applying a query request to the indexed data for generating the query results.

30. The search result service according to claim 25, wherein receiving rating data comprises compiling rating data from an on-line ranking system based on interactive criteria, and indexing the on-line rating data.

31. The search result service according to claim 25, wherein receiving rating data comprises compiling rating data from any one or more of a questionnaire, a survey, or a web based rating service.

32. The search result service according to claim 25, further comprising compiling rating data based on interactive criteria that assess the quality of a business in terms of any one or more of: customer satisfaction, professionalism, cost, and ease of use of a product or service.